Health and the Environment

a collaborative publication by:

DISRUPTIVE™ WOMEN IN HEALTH CARE

& THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APRIL+OCTOBER 2012 #DWenviro
Facebook.com/disruptivewomen

Table of Contents

Robin Strongin

Introduction to Disruptive Women's Health and the Environment Series

***President & CEO** of Amplify Public Affairs, LLC*

***Creator and Founder** of Disruptive Women in Health Care*

Earlier in 2012, Disruptive Women worked closely with the EPA Administrator Lisa P. Jackson and her team to organize a number of meetings that took place at the EPA and White House, all of which shared the goal of giving voice to women concerned about the linkages between the environment, health, and wellness. Disruptive Women was happy to support the EPA as it highlighted contributions that women have made and continue to make in these fields, and was thrilled to participate in the lively discussions, actively engaging with speakers throughout the series of events.

As a health care blogger who cares deeply about the role of women, I was surprised by how forcefully I was moved by the issues that were raised throughout these events. When presented with a full picture of the link between human health and the environment, I knew that my engagement with this issue could not end when I left the last event at the White House.

That is why this April, in Honor of Earth Month, Disruptive Women ran a series of blog posts showcasing issues where health and the environment intersect. In these posts, our guest bloggers examine the link between health and the environment from various angles, each highlighting areas of professional and personal importance. The personal nature of these posts is paramount to the goal of this project, and it is important to note that the authors were free to write about any topic – without restriction or guidance from the EPA or the Disruptive Women in Health Care blog. My hope is that these posts will open your eyes and encourage deeper reflection and further discussion on the topic of health and the environment.

I would also like to thank Elliot Patton for his editorial assistance and David Lee for his design production.

THE WHITE HOUSE
WASHINGTON

WOMEN AND THE ENVIRONMENT

March 26, 2012
Eisenhower Executive Office Building
Room 430 ABC
9:00 am – 12:00 pm

Welcome to the White House

Valerie Jarrett - Senior Advisor to President Obama and
Chair of the White House Council on Women & Girls
Tina Tchen - Chief of Staff to the First Lady and
Executive Director of the White House Council on Women & Girls

Opening Remarks

The Hon. Lisa P. Jackson, Administrator
U.S. Environmental Protection Agency

Diane E. Thompson – Chief of Staff, U.S. Environmental Protection Agency

Update on President Obama's Energy Agenda

Heather Zichal, Deputy Assistant to the President for Energy and Climate Change

EPA – Protecting Human Health & the Environment

Bicky Corman, Deputy Associate Administrator – Office of Policy (Moderator)
Panel #1: *Nancy Stoner, Acting Assistant Administrator – Office of Water; Cynthia Giles, Assistant Administrator – Office of Enforcement & Compliance Assurance; and Judith Enck, Regional Administrator – EPA Region 2; Michelle J. DePass – Associate Administrator – Office of International & Tribal Affairs*

Panel #2: *Gina McCarthy, Assistant Administrator – Office of Air & Radiation; Sarah Hospodor-Pallone, Deputy Associate Administrator – Office of Congressional & Intergovernmental Relations; Barbara J. Bennett – Chief Financial Officer; Gwendolyn Keyes Fleming, Regional Administrator – EPA's Southeast Region*

Action Workshops & Report-Out

Obama Administration Environmental Initiatives

Nancy Sutley – Chair, White House Council on Environmental Quality

The Way Forward: Women & the Future of Environmental Protection

The Hon. Lisa P. Jackson, Administrator
U.S. Environmental Protection Agency

Leilani Münter

Why A Plant-Based Diet Will Save The World

Photo Credit: Craig Davidson

Carbon Free Girl

Race Car Driver & Environmental Activist

Meat eaters, please pay attention. There are now over 7 billion people on the planet and we desperately need you to understand the following information. I'm just going to lay out the facts for you, and then you can make your own decision.

In November 2006 an interesting study was released by the United Nations that showed that more greenhouse gas emissions are produced by growing livestock for meat than all the planes, trains, ships, cars, trucks, and all forms of fossil fuel based transportation combined. Cattle produce nitrous oxide and methane, which is 23 times as heat trapping as carbon dioxide. Livestock is also a major source of the degradation of our land and water. One third of the Earth's land surface is now being used for livestock, most of it is permanent pasture but also includes 33% of the global arable land that is being used to produce feed for livestock. The land is becoming degraded due to overgrazing, erosion, inadequate livestock management, deforestation, forest fires and climate change. We now lose more than 20,000 square miles of fertile land to desertification worldwide every year.

Water pollution from animal wastes, antibiotics and hormones, chemicals from tanneries, fertilizers and pesticides make livestock one of the most damaging sectors to our earth's scarce water sources. According to the World Heath Organization and NASA, water shortages are currently affecting 1.1 billion people and by 2050 will affect nearly half of the 10 billion that the UN estimates will be our total population at that time.

Do you know what meat is doing to our beautiful rainforests? It's killing them. 70% of the rainforest that has been cut down is being used to graze livestock. And when we destroy the rainforest for hamburgers, we are losing so much more than trees.

> Nothing will benefit human health and increase the chances for survival of life on Earth as much as the evolution to a vegetarian diet.

Nearly half of the world's species of plants, animals and microorganisms are at risk of extinction over the next quarter century due to rainforest deforestation. More than 20% of the world's oxygen is produced in the Amazon Rainforest alone and in addition to being the "Lungs of the Earth" rainforests may very well hold the key to the cures for many human diseases. The U.S. National Cancer Institute has identified 3000 plants that are active against cancer cells - 70% of these plants are found in the rainforest. Experts estimate that the last remaining rainforests could be consumed in less than 40 years. All in the name of cheap hamburgers.

One acre of land can produce 165 pounds of beef OR 20,000 pounds of potatoes. And it takes 23 gallons of water to produce a pound of tomatoes. By comparison, it takes over 5000 gallons of water to produce just one pound of beef. Sit down and digest those facts for a while.

In addition to the health of the planet, there are also many human health benefits to a plant based diet. However, since my contribution to this book is limited to 800 words, instead of trying to summarize it in a couple paragraphs, I am just going to recommend you watch the documentary "Forks Over Knives."

Albert Einstein once said, "Nothing will benefit human health and increase the chances for survival of life on Earth as much as the evolution to a vegetarian diet."

I think Einstein was on to something. But you can decide for yourself.

Never underestimate a vegetarian hippie chick with a race car. LEILANI MÜNTER

Alexandra Dunn

A Call to Action: Clean Water for a Healthy America

***Executive Director & General Counsel** of Association of Clean Water Administrators*

Water. A universal element without which we cannot live. When polluted and contaminated, public health is compromised. Children die every minute due to dirty water on our planet. The amount of freshwater on Earth is finite. As such, many experts say the next war will be over water. Ensuring access to clean and safe water should be one of the top priorities of our nation. And yet, here in the United States, our drinking water and wastewater infrastructure is crumbling – rated a D- by the collective civil engineering community. People pay more for satellite television and cell phone service per month than they do for drinking water and wastewater services.

When the Clean Water Act was enacted in 1972, rivers burned. Lake Erie was declared dead. The endangered sturgeon were gone from the Hudson River. Ecosystems were dying. And people who depended on the water environment for a living and to feed their families – commercial and subsistence fishers – found their livelihoods and tables threatened.

The Clean Water Act's enactment over Presidential veto in 1972 marked a dramatic turn of events. It was what is known as a civic republican moment. When people come together and demand change. Among its dozens of powerful and useful provisions to control water pollutions, the Act put in place the Construction Grants Program for clean water infrastructure. The Program resulted in some of the largest public health gains of the past 50 years by building sewage treatment facilities, sewage conveyance systems, and related critical infrastructure. We did not build everything new – pipes in the ground today in many cities still date from the turn of the century and facilities built for 1970 level populations are now undersized. Nonetheless, the federal government stood hand in hand with states

and communities as these investments were made. The water got cleaner. People and ecosystems got healthier. We recognized the critical value of clean and safe water.

In 1987, things changed. Congress replaced the grant program with the Clean Water State Revolving Loan Fund. The philosophy was that water is a local community issue, not a federal priority. Localities should be paying for the needed investments themselves. While elements of the philosophy certainly made sense, over time, the modest increases to the Fund have not kept pace with the investment needs. Today, water infrastructure investment is funded 90 percent by people like you and me through our water bills. The economy is weak, and water service rates can only go so high before people – especially the elderly and those of low income – can't pay. Adding to the infrastructure stressors are a growing population and more intense and erratic wet weather events associated with climate disruption. The Environmental Protection Agency itself says without a recommitment to infrastructure investment we risk a return to the water quality crisis of the late 1960s and early 1970s.

The Clean Water Act enters early middle age this year as it turns 40. Isn't mid-life a time for reassessment of priorities? A gut check to see if we're on the right path? Nothing could be more important to public health and the quality of life we want to enjoy in the future in our nation than clean water.

It is time as a nation to develop and implement a sustainable funding source for our critical water infrastructure. We need our lakes, our rivers, our streams to be healthy so that we can be healthy. Let's not take the gains of the past 40 years for granted. Clean water is worth our time, attention, and investment.

The Clean Water Act set forth an ambitious goal in 1972 – to restore the physical, biological, and chemical integrity of the nation's waters. We are not there yet. It is time to recommit to, and reinvest in, water. For our health and the health of the environment and all that depends on clean water.

Laura Harwood

Man of the Month: Don Mathis

Senior Associate of Public Affairs & Strategic Alliances
at Amplify Public Affairs, LLC

In January 2011 Disruptive Women interviewed Don Mathis, President and CEO of Community Action Partnership (CAP). CAP represents the interests of 1,100 Community Action Agencies (CAA's) across the country that help 17 million low-income Americans annually to fight poverty and achieve economic security. In January, we introduced Don to our readers and focused on how CAP's social service programs relate to health policy initiatives. This month, we focus on the intersection of health and environmental issues in conjunction with Earth Day, April 22nd.

I recently caught up with Don to learn what the Partnership is doing in the environmental space to help create and promote a safe and healthy economy. He shared many examples of local agency leaders, or "heroes," as he calls them; people who have emerged as local agents of change by implementing innovative, community specific programs.

Some shocking realities emerged about our economy's wealth gap and the tremendous potential for a clean or green economy to create jobs for the low-income individuals in their communities. Some of CAP's initiatives include the Community Economic Development (CED) program, Job Creation and Green Jobs project, as well as deconstruction and recycling programs.

In order to learn more about how you came to be Don Mathis, I reviewed some of your previous interviews and bio. You have a long history in this type of work, so could you tell me a little more about your background?

Well I started as a volunteer for Head Start when I was in grad school at University of Delaware--I was a really good volunteer and a really bad grad student. I was a TA in the Philosophy Department and there was a Head Start directly across the street from my office. When school got

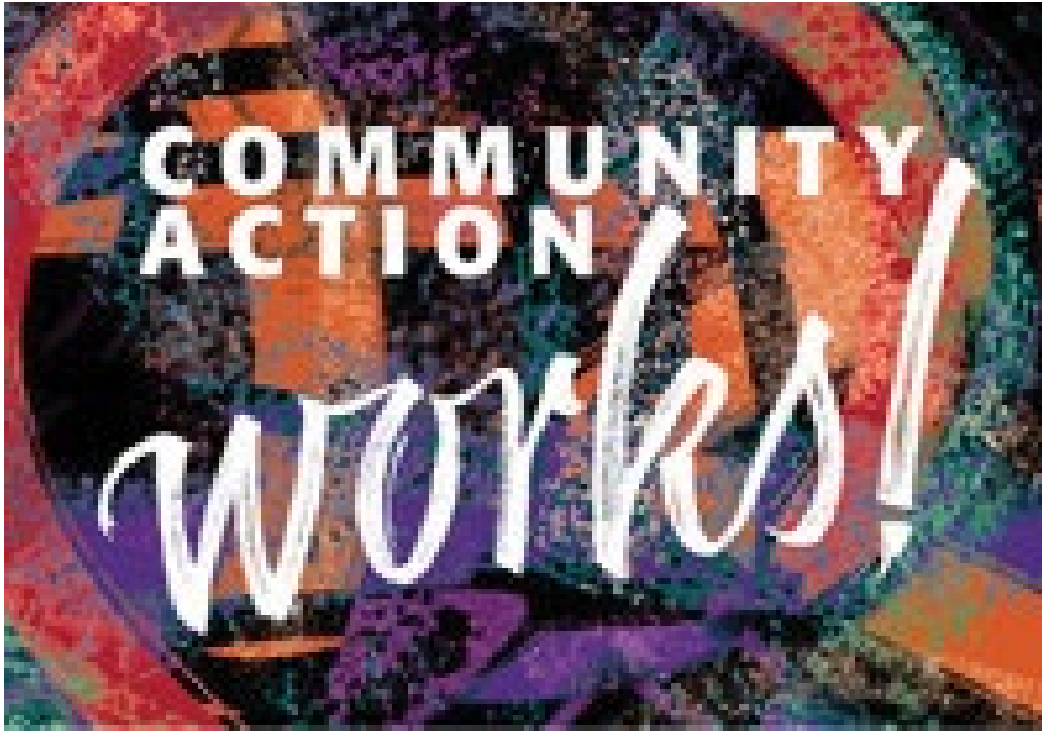
exceptionally boring, I would go over to the center and play with the kids, which was good at the time because there weren't many male volunteers. More than a few kids didn't have a dad or a male figure in their life. So I started volunteering more and going to class less and one day they asked, "Why don't you work for us?"

I quickly learned a lot while on staff. I found that there are very modest ways that one can act that make big differences in the lives of people and families--that became good enough for me.

I've been very fortunate to be involved with programs that directly help people while driving policy agendas in ways that are helping people.

DW is one of your biggest fans; you are the first Man of the Month to receive this honor twice, which is in line with our environmental theme -- we are doing our due diligence to "recycle." (Don laughs.) This month, we wanted to tie in your work to the White House EPA event, National Public Health Week ***and Earth Day.***

What we focus on is economic security and anti-poverty, so the hook with helping the environment is that both the priorities are preventive in nature. If you look at the poverty statistics that U.S.



Census Bureau reports, it is just outlandish. It is the highest number of poor people in the history of America. What CAP does is come in and make sure people have good health and that their environment is safe so that when the EPA passes the mercury rule or clean air rule it proportionally affects low-income families better because they don't have the resources. They are the most susceptible to toxins. So the hooks are clear between clean air, getting rid of mercury, clean water, healthy environment and healthcare. What the research actually shows, Laura, is that if you are healthier as a kid, you're less likely to be poor as an adult.

Community Action Partnership is the leading organization of its kind that serves such a large population. How does your work tie back to energy and the environment specifically?

The green jobs/green economy offers a lot of potential. You can go to a community college and get a certification in weatherization. You can get into an apprenticeship program without a 4-year degree and do good energy stuff. The energy piece is a growth opportunity and I'm not just talking solar panels, but clean water to wind turbine farms. I was in the middle of nowhere West Virginia last year on this wind farm. They have job openings there where the lowest paying job is $22/hour and they can't find people to fill those jobs because there's nothing else there. That's the potential that clean energy

economy offers.

Lisa Jackson, the EPA Administrator, has communicated a clear and simple message about a green, healthy environment and a healthy economy. In honor of Women's History Month, she recently stressed this connection at a round table: "You do not have to choose between a healthy environment and a healthy economy." Do you agree with her position?

Yes, I do agree with Lisa. A clean economy is a green economy and as I mentioned earlier, there is tremendous value for low-income people for these types of jobs where you don't have to have a 4 year degree.

We really need a comprehensive, thoughtful plan that helps ensure we have healthy communities and healthy people and thereby healthy, employable workers and citizens. And if we don't, there is a cost associated with it that is inescapable if we don't take responsibility. People criticize the Affordable Care Act and say, "Well, what do we need this for?" When people go to emergency rooms, who do you think picks up that cost? It's not a zero-sum game. We need that type of responsible environment for our country. The good thing is, as dismal as this may seem, there are solutions. We can mix conservation, diversify our energy systems; bottom line is we need to be creative and conscientious. We need to reward, incentivize, and educate our young generation that these issues are important.

"Science is important!" There's a radical thesis there (laughs). But it's true, and there are naysayers that discount science, but they do so at the expense of themselves, their children and future generations.

In general, do you have an overarching goal you are trying to achieve for the people you serve as it relates to the environment?

The importance of responsible health and environmental policy is that if we really want to make a commitment to having families be economically secure, it has to be more than just about a good job. A good job is necessary, but it's not sufficient and it has to be in the context of a community that's environmentally sound

or at least working to get there where there is some bottom line access to health services. These are all things that are interdependent and these dynamics are interrelated. The good news is that we can address all the variables separately in ways that enhance the quality of life for everybody.

Closing thoughts?

One of the things we've become more involved in are deconstruction programs. Deconstruction is when they tear down a building or house and instead of "junk-yarding" everything away; you salvage the grit, the wood, the recyclable stuff, and turn them into products that can be purchased in the open market. This is really an emerging field. Think about scrap metal for everything. So many CAA's are getting into deconstruction because it is good for the environment, reduces landfill waste, provides jobs and promotes the resale and reuse of goods. I have some new photos that show these people working in these deconstruction or "Demo Depot" centers.

To learn more about the Partnership's programs that Don oversees or how you can get involved, visit:

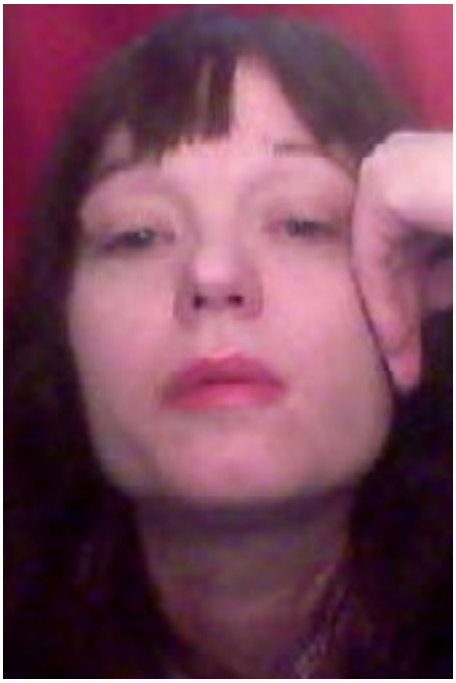
Community Action Partnership

Also, check out CAP's new project website:

Community Economic Development

Mary Ann Swissler

Victory for Prevention?



Writer and Critical Thinker

As we celebrate Earth Day this Sunday, the author is cautiously optimistic about a new era with a healthier environment. The post originally ran on the Women's Media Center on April 19th.

They're not copays or premiums yet there's no doubt that polluted air and water exact a high health cost. Still, the arguments over how to deal with that part of the healthcare equation have gone back and forth for decades. Last year, for instance, an Institute of Medicine study on links between the environment and breast cancer concluded that while some toxins cause cancer, it's impossible to match one specific chemical to one specific case of cancer.

Now, however, the Affordable Care Act has changed the rules of the game. Its guiding principle is "do no harm," and the legislation sets out a new standard for evaluating research on the alleged harmful effects of pollution. It's similar to the different standards of evidence in civil and criminal law. In the past, something like the criminal-law standard of "beyond a reasonable doubt" prevailed. Now the federal government standard in research cases will be the same as in civil law: If a preponderance of the evidence suggests that some substance is harming people's health, that's a basis for action.

The details are found in a document called the National Prevention Strategy, released last year as part of a 2010 presidential mandate. It notes, "Safe air, land, and water are fundamental to a healthy community environment." Included as a goal of the strategy is to increase the availability of health professionals to "identify, prevent, and reduce environmental health threats." Clinicians, the document states, "can provide information and counseling on how to prevent, treat, and manage environmental-related exposures, including indoor air pollutants, lead, mercury, and pesticides." The National Prevention Council is "working diligently toward finalizing the implementation plan and it should be ready in the coming months," according to a source

inside Health and Human Services.

If all goes well, and that's a big if considering how strongly our political climate favors polluters, this strategy can help turn back the tide of toxins in the environment. For instance, it took 21 years for the new federal mercury standards to become law and it quickly faced a challenge from the Congressional Review Act. Luckily, the objection failed. The new rule which promises to eliminate 90 percent of mercury emissions from coal-fired power plants, can proceed.

Just as environmental improvements brought about by the Clean Air Act have, according to the EPA, prevented some 160,000 premature deaths, the new environmental standards are expected, within a few short years, to greatly reduce the incidence of many health problems in this country, including asthma and heart attacks. The National Strategy provides hope—if it survives the Supreme Court's ruling on the Affordable Care Act and is sustained by future administrations—of progress against many pollutants, even though neither the strategy document nor the Affordable Care Act grants new government enforcement powers regarding clean air and water.

Still, the raw ambition of this plan is exciting. My recommendations as a keen researcher of activism and politics for making it work:

1 Involve environmental engineers in this prevention strategy. They'll find solutions for industries rather than just handing down edicts from on high. Face it, environmentalists—we've won. It will be a long slog but we now have public health laws on our side.

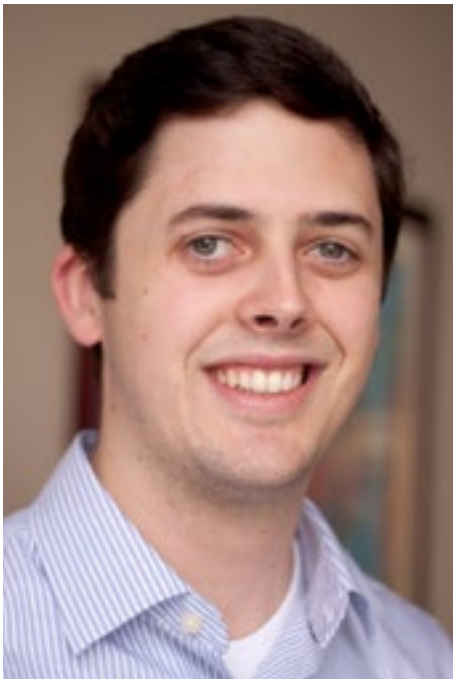
2 Address environmental racism and low-income biases. Incinerators, for example, are more likely to find homes in politically weak neighborhoods, which not coincidentally are where people of color and those with low income live.

3 Stress job-creating abilities and have fighting words ready when attacked by moneyed interests. Better yet, sell it to the American public now, emphasizing the state and local impacts. Otherwise, it's too theoretical. The truth is pollution controls don't cut into job creation. Instead they cut into short-term corporate profits meaning companies don't plough their profits back into their operations. Hence the corporate resistance to pollution controls.

4 Create incentives for business, not only penalties. Part of the billions of dollars collected in fines each year should be used to entice businesses to invest in environmental cleanup technologies. It could do wonders for their quarterly financial statements and thus their motivation to do good. This wiggle room for corporations could end the "job killer" canard once and for all, when it comes to pollution controls.

Elliot Patton

Sustainable Communities : Their Contribution to Our Health and Our Environment



Associate of Public Affairs & Strategic Alliances *at Amplify Public Affairs, LLC*

In the ongoing struggle to find ways to promote our health and the health of our planet, very narrow and specific approaches are often proposed. In order to create effective and lasting change, however, it is necessary to embrace broader measures and completely reevaluate the way we live and interact with the world around us on a daily basis. By re-envisioning the American community, we can create living spaces that offer tremendous benefits to our health and to our environment: we can become truly sustainable.

A sustainable community is one where emphasis is placed on livability and efficiency. It provides its inhabitants with ample public transportation options, and also encourages mixed land use where residential and commercial facilities coexist to decrease the need for motorized transportation. An inhabitant of a sustainable community should be able to access all necessities easily on foot or by public transportation. These compact communities are a move in the opposite direction of the suburban sprawl that has characterized the development of past decades, and which has defined the lifestyle of hundreds of millions of Americans. Another important aspect of these communities is their inclusion of green space, which is very important both for the processing of CO2 and for making the community a pleasing place for an inhabitant to be a part of.

The positive impact that these communities would have on the environment, human health and the inhabitants would be absolutely enormous.

The biggest gains to be made from transitioning to more sustainable communities come from reduced automotive travel; burning fossil fuels for transportation is one of the most obvious ways that we harm our environment on a regular basis. The Department of Transportation estimates

that about 18% of annual CO2 emissions come from passenger vehicles. When it comes to abating these emissions, much of the focus is on engineering more fuel efficient cars, but a much more reasonable and immediately available source of abatement would be to reduce the number of miles that we drive. According to the Federal Highway Administration, the average American drives almost 37 miles every day, and reducing this number would have a huge impact on our environment. In addition to greenhouse gas emissions, extra miles on the road impact individuals and their environment in countless ways. Water pollution occurs when rain washes fluids off of the road and into our fresh water sources, our landscapes are destroyed and useful land wasted by the enormous number of parking spaces that must be available for our cars. In addition to the cost to our environment, spending too much time in cars is also detrimental to our health and wellbeing. First of all there is the increase in daily exercise that comes with walking rather than driving, and there is also the opportunity cost of the time that we spend in the car that could be spent working or with family. By creating a community infrastructure that is less focused on a car-centric lifestyle, we can decrease emissions drastically and improve the health of our population.

Cities are constructed over long periods of time, and altering their fundamental structures can appear to be an unobtainable goal. Some of the new development that is needed in order to create a sustainable community can be achieved by utilizing "brownfield" locations which have been deemed undevelopable due to the presence of harmful substances. These unused locations are able to be cleaned and restored to developable status, but this additional expense often

makes development of these sites cost prohibitive. Cities including Pittsburgh, Seattle, Atlanta and Portland have utilized brownfield sites as part of sustainable development efforts, and these areas have turned into booming economic centers for the cities. In addition to playing a role in sustainable development, cleaning and redeveloping brownfield sites has the dual benefits of removing health hazards and creating opportunities for economic growth.

The need for more sustainable development has not been overlooked by those in the federal government; in 2009, the Environmental Protection Agency, The Department of Transportation, and the Department of Housing and Urban Development came together to form the Partnership for Sustainable Communities. This partnership was bred from the recognition that the environment, transportation and housing are inherently interconnected, and that it would benefit all three organizations (and more importantly, the American people) to collaborate on issues of development. EPA Administrator Lisa P. Jackson explained the partnership's efficiency by noting that

> Working across agencies gives us an opportunity to share knowledge, resources, and strategies that will improve public health and the environment, cut costs and harmful emissions from transportation, and build more affordable homes in communities all over the country.

The formation of this partnership, and the efforts that they have put forth in the years that they have been active, is a very good sign for the prospect of becoming more sustainable on the community level and throughout the country as a whole.

Creating communities that embody the principles of sustainability is a long term task, but one that must be completed in order to vastly improve the human experience on this planet. We cannot continue to expand into the suburbs, requiring more roads and more parking spaces and forcing individuals to waste years of their lives behind the wheel of a car simply going to and from work.

Our built environment influences our behavior, and our behavior influences our health and the health of the world we live in. Let's change the way we fashion our built environment in the future.

Here are some links to more information about the issues discussed in this post:

- Pittsburgh Brownfield Development
- CO2 Emission Statistics
- Partnership for Sustainable Communities

Randi Kahn

She Goes Green

The Environmental Protection Agency commenced efforts to encourage women to become green champions for themselves, their families, and their communities. On Tuesday, March 20, in honor of Women's History Month, EPA invited a group of female health leaders, including myself, to join Administrator Lisa Jackson for a round table discussion on the connection between the environment and health and the enormous stakes of today's policy discussions.

The Administrator's message was clear and simple, "You do not have to choose between a healthy environment and a healthy economy," she said. "We have a moral obligation to address climate change and the majority of things to tackle it actually add jobs."

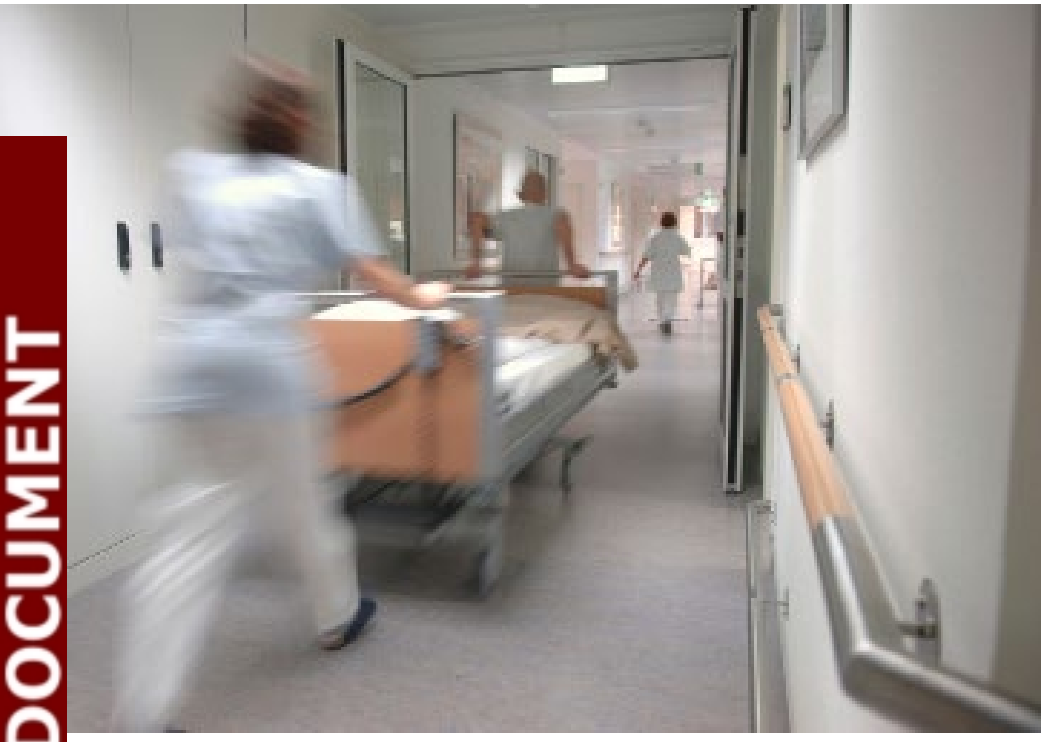
Others around the table discussed the impact of poor health on the job market and the economy as a whole – with those who are chronically ill or have a child who is chronically ill frequently missing work and often distracted when they are able to attend. Some are even unable to hold a steady job at all because of preventable ailments.

"Poor health is a greater cost of jobs and productivity than making an investment in the environment," said Lisa Allen from the American Heart Association.

Janice Nolan from the American Lung Association added, "In terms of health care, we can save $10 for every $1 invested in clean air programs."

But unfortunately, making that case is often a struggle, perhaps because it is difficult to quantify the impact of environmental standards and regulations on health conditions. There are some statistics and studies on the impact of chemicals and toxins on certain cancer rates and the connection between air pollution and asthma and COPD, but that research often focuses primarily on

> Poor health is a greater cost of jobs and productivity than making an investment in the environment.



environmental factors that have yet to be regulated or where we need to do more, and rarely looks at the big picture to bring to light the enormity of the problem and the costs (in dollars and lives) associated with it.

There is no research that shows how far we've come in the past thirty years since the Clean Air Act. It's hard to measure reductions in neurological damage in babies avoided because of mercury controls, or cases of liver cancer prevented through standards that have reduced arsenic levels in water, etc. It is hard to put a face on an issue we so often take for granted, and that can be influenced by other factors as well (it is often a combination of environmental exposure and genetics that determines who gets a particular disease). That's where consistent messaging and you, as a Disruptive Woman in Health Care, can help. Share your stories of how environmental health has impacted the economic health of you or someone you love in the comments section and spread the word about the importance of preserving our environment in your community. With your help we can make sure that we leave behind both a healthy environment and a healthy economy for our children.

To learn more about the importance of environmental health and the health of the environment in your community check out the following resources mentioned at the EPA roundtable discussion:

- The American Lung Association's State of the Air Report
- EPA's Clean Air Where You Live Map
- Moms' Rising Podcast featuring Administrator Jackson: "Mom to Mom: The Controversy of Clean Air"

Cari Rudd

Toxics and Human Health

Cari Rudd is a member of Rachel's Network, former Chair of the Board of Directors of the Environmental Working Group Action Fund, and a committed advocate and funder of environmental conservation.

Every day, Americans are exposed to toxic chemicals in our homes, schools, work places, and everyday consumer products. BPA in food and beverage containers, formaldehyde in our furniture, flame retardants in our children's clothing, arsenic in our chicken, lead in our lipsticks, and the list goes on and on.

These chemicals are associated with cancer, reproductive problems, and behavioral effects, yet they persist in the environment for decades. President Obama's Cancer Panel agreed in 2010 that reforms were critical, yet those recommendations have yet to be implemented.

Less than 10 years ago, while there was already plenty of documentation of pollution in our environments, there was scant evidence of the pollution that accumulates in our bodies. Rachel's Network took a bold and necessary leap to close the gap between toxic compounds found in everyday consumer products and the human health risks associated with them. By providing the initial funding for the first-ever comprehensive study on human exposures to industrial chemicals, Rachel's Network led the way to collect evidence documenting chemical contaminants in the human body, including chemicals banned decades ago.

Among the alarming and groundbreaking results, the human testing revealed chemicals found in:

PCBs: industrial insulators and lubricants banned in the U.S. in 1976

Dioxins: pollutant by-products of PVC production, industrial bleaching, and incineration

Metals: lead, mercury, arsenic, and cadmium

Insecticides: DDT, organophosphates, and other pesticides

The Rachel's Network-funded study also led to additional testing in low-income and minority communities, where access to adequate health care and poverty can compound the effects of exposure to pollution.

That research included testing of infant umbilical cord blood that revealed the shocking pervasiveness of toxic chemicals in children, even before birth.

The results of that study, combined with continued testing, underscore a widespread failure of current law to protect the public from harmful toxics. U.S. companies are exempt from disclosing the contents of their products under the ineffective and antiquated Toxic Substances Control Act (TSCA), passed in 1976.

The Safer Chemicals Healthy Families Coalition is currently leading the way to reform TSCA, with over 11million individuals advocating for safer laws regarding chemicals in our homes and lives. Rachel's Network is proud to be a member of the Coalition and to have expanded the evidentiary record of the health hazards posed by unregulated toxics.

Rachel's Network, a national nonprofit, promotes women as impassioned leaders and agents of change dedicated to a healthy environment. By building strategic alliances and fostering productive partnerships, the organization maximizes the collective action and unified voices of women committed to environmental protections.

Addendum: Remarks by The Honorable Lisa Jackson

March 26, 2012 — EPA Administrator Lisa Jackson commences the event with her welcome speech.

Let me wish you all a happy Women's History Month.
Thank you so much for being with us today and being part of this discussion.
It is part of my job to welcome you here this morning, so I just want to say a few words about where we've been… about how important women are to environmental and health protection… and about how these issues affect us in particular.
The impact that women have had in environmental protection is a story that's really not told enough. It's a history that dates as far back as the 1930s, when a woman named Rosalie Edge first took on the established notions of environmental conservation.
In later years others like Sylvia Earle, Marjory Stoneman Douglas and Rachel Carson emerged as leading advocates for protecting our health and environment.
The EPA has had six women in its highest office over the course of our 40 year history.

Click here to watch the live opening remarks.

Today, more and more of our employees and managers and scientists and leaders are women – including the wonderful Stephanie Owens, who deserves lots of credit for bringing us all together today.
We also have broad support from women advocating on behalf of their health and their families and their communities. Groups like Moms Rising and Mocha Moms – women who are concerned about their health and the health of their children – have been instrumental in our progress over the last three years.

It has been my honor to be a part of this history of women's leadership in environmental and health protection – and to do my part to keep that history moving forward.
One of the reasons women's involvement is so important in this field is that the environment has a profound impact on women's health. Chronic health conditions that have been linked to air pollution – like high blood pressure, COPD, and asthma – are more common in women over 50 compared to men in the same age group.

Photo credit: EPA

Women are frequent sufferers of heart attacks and cardiovascular disease – another deadly medical issue linked to pollution in the environment. This is something that affects one of every two women – and it is the most frequent cause of death for women.

And of course there are many cases where women's health is indistinguishable from children's health – for instance, when it comes to chemicals in our environment, which can be passed down in the womb and expose our children at their most vulnerable stage.

In the last three years we have counted on American women and mothers to help us tackle critical environmental issues.

At the end of 2011 EPA finalized the Mercury and Air Toxics Standards – or MATS – to limit mercury and other emissions from power plants. Mercury is a neurotoxin that threatens the health of our children – and before MATS there were no national standards limiting mercury emissions from power plants.

That was not for lack of trying. The Clean Air Act called for these protections 20 years ago. It wasn't until recently – with the backing of community groups, and mothers, and doctors, and environmentalists and others – that we were able to get MATS done.

It was a major victory for our health. Once the MATS standards are fully implemented, they will prevent up to 11,000 premature deaths, nearly 5,000 heart attacks and about 130,000 asthma attacks. Behind those numbers are pregnant mothers who can rest a little easier knowing that their children won't be exposed to harmful levels of mercury in critical development stages, and young people who can go outside with their friends without worrying about an

asthma attack.

MATS is just one item on a list that includes cleaner power plants, cleaner cars, healthier waters and better safeguards for chemicals of concern in our environment. MATS is also one of the things EPA has done that some people and special interests are trying to do away with. Once again – we're counting on women to help us prevent that from happening. We know that if they take away these health protections, then they are taking away vital protections for women's health. If they make it easier for big polluters to pollute, then they make it harder for women and mothers and their children to live healthy lives.

The truth is, clean air and clean water don't happen by accident. Health safeguards are not a given. It takes vigilance, and it takes hard work to ensure that those things are protected and passed down to the next generation.

The same thing is true of every advance women have made in our history. It took bold action to achieve fundamental things like the right to vote, and the assurances of equal pay for equal work. It takes more than a few taps to break glass ceilings. The equality we've sought and continue to seek is not something that happens by accident. We have to keep at it.

Now – another important part of our success has been the leadership of President Obama. I'm proud to serve a President who has said that we can't wait on these issues. I'm proud to serve a President who knows that EPA's health protections are vital to the American people – and that the choice between our economy and our environment is a false choice.

And I know I can feel extra confident in our president because he has made the very smart decision to surround himself with powerful, brilliant women in the White House. Many of them are here today and will be speaking with you. So with that, I will let you all get started. Once again, thank you very much for being here, and I look forward to following up with you this afternoon.

Thank you very much.

Valerie Jarrett, Senior Advisor to the President for Intergovernmental Affairs and Public Engagement, speaks during the conference. Photo credit: EPA

EPA Resouces

Code Red? Understanding the Air Quality Index

http://www.epa.gov/airnow/aqi_brochure_08-09.pdf

Local air quality affects how you live and breathe. Like the weather, it can change from day to day or even hour to hour. The U.S. Environmental Protection Agency (EPA) and your local air quality agency have been working to make information about outdoor air quality as easy to find and understand as weather forecasts. A key tool in this effort is the Air Quality Index, or AQI. EPA and local officials use the AQI to provide simple information about your local air quality, how unhealthy air may affect you, and how you can protect your health. – EPA.gov

How Climate Change Affects our Ecosystems and our Health

http://www.epa.gov/climatechange/effects/health.html

http://www.who.int/mediacentre/factsheets/fs266/en/index.html

http://www.cdc.gov/climatechange/effects/default.htm

http://www.niehs.nih.gov/health/assets/docs_a_e/a_human_health_perspective_on_climate_change.pdf (extremely in-depth report)

Human beings are exposed to climate change through changing weather patterns (for example, more intense and frequent extreme events) and indirectly through changes in water, air, food quality and quantity, ecosystems, agriculture, and economy. At this early stage the effects are small but are projected to progressively increase in all countries and regions. – EPA.gov

Air Pollution is a Major Health Issue: Both Outdoors AND Indoors

http://www.epa.gov/iaq/pubs/occupgd.html

http://www.who.int/mediacentre/factsheets/fs292/en/index.html

Most Americans spend up to 90% of their time indoors and many spend most of their working hours in an office environment. Studies conducted by the U.S. Environmental Protection Agency (EPA) and others show that indoor environments sometimes can have levels of pollutants that are actually higher than levels found outside. – EPA.gov

WORLD HEALTH ORGANIZATION: Environmental Causes of Cancer

http://www.who.int/mediacentre/factsheets/fs350/en/index.html

Cancer is a leading cause of death worldwide, with 12.7 million new cases and 7.6 million deaths in 2008. Currently, 63% of all cancers deaths are reported from low- and middle-income countries and this figure is predicted to increase. Globally, 19% of all cancers are attributable to the environment, including work setting, resulting in 1.3 million deaths each year. – WHO.int

Skin, Your Largest Organ, and the Effects of UV Rays

http://www.who.int/mediacentre/factsheets/fs305/en/index.html

http://www.epa.gov/sunwise/uvindex.html (guide to understanding the UV index)

Small amounts of UV radiation are beneficial to health, and play an essential role in the production of vitamin D. However, excessive exposure to UV radiation is associated with different types of skin cancer, sunburn, accelerated skin ageing, cataract and other eye diseases. There is also evidence that UV radiation reduces the effectiveness of the immune system. – WHO.int

CDC: Harmful Algal Blooms, How Marine Life is Affecting Our Health

http://www.cdc.gov/nceh/hsb/hab/default.htm

Algae are vitally important to marine and fresh-water ecosystems, and most species of algae are not harmful. Algal blooms occur in natural waters used for drinking and/or recreation when certain types of microscopic algae grow quickly in water, often in response to changes in levels of chemicals such as nitrogen from fertilizer, in the water. Algal blooms can deplete the oxygen and block the sunlight that other organisms need to live, and some can produce toxins that are harmful to the health of the environment, plants, animals, and people. – CDC.gov

NIEHS: Endocrine Disruptors in our Environment

http://www.niehs.nih.gov/health/assets/docs_a_e/endocrine_disruptors.pdf (fact sheet)

http://www.niehs.nih.gov/health/topics/agents/endocrine/index.cfm (more resources)

Endocrine disruptors are chemicals that may interfere with the body's endocrine system and produce adverse developmental, reproductive, neurological, and immune effects in both humans and wildlife. A wide range of substances, both natural and man-made, are thought to cause endocrine disruption, including pharmaceuticals, dioxin and dioxin-like compounds, polychlorinated biphenyls, DDT and other pesticides, and plasticizers such as bisphenol A. Endocrine disruptors may be found in many everyday products– including plastic bottles, metal food cans, detergents, flame retardants, food, toys, cosmetics, and pesticides. — NIEHS.NIH.gov

Water Pollution

http://www.niehs.nih.gov/health/topics/exposure/water-poll/index.cfm

Water pollution is any contamination of water with chemicals or other foreign substances that are detrimental to human, plant, or animal health. These pollutants include fertilizers and pesticides from agricultural runoff; sewage and food processing waste; lead, mercury, and other heavy metals; chemical wastes from industrial discharges; and chemical contamination from hazardous waste sites. Worldwide, nearly 2 billion people drink contaminated water that could be harmful to their health. — NIEHS.NIH.gov

The Benefits of a Vegetarian Diet

http://www.vegsoc.org/page.aspx?pid=784

Diet influences most aspects of health and dietary factors clearly contribute to the major degenerative diseases such as heart disease, stroke and diabetes. Obesity and high cholesterol are major contributory factors linked to these diseases and also to meat consumption and low intakes of fruit and vegetables. A high BMI (body mass index) is the result of a number of factors including food choices. Compared with omnivorous diets a varied vegetarian diet contains less saturated fatty acids, cholesterol and more folate, fibre, antioxidants, phytochemicals and carotenoids all of which are associated with specific health benefits. – vegsoc.org

AMPLIFY
PUBLIC AFFAIRS

DISRUPTIVE™
WOMEN
IN HEALTH CARE